

G. Wildlife & Fish Habitat

1. Wildlife - There are at least 37 species or subspecies of mammals and 139 species of birds that can be expected to be found within the study area. Sixty two different birds are residents, but ten may also be winter or summer visitants. The amphibians and reptiles are more limited in relation to total wildlife numbers and their occurrence can sometimes be associated with annual seasons and rainfall patterns.

The Santa Ana Mountain Range has a variety of wildlife. The richest habitats are the riparian vegetation areas and the oak and conifer woodlands. Snags, steep bluffs, cliffs and large rock formations are essential habitat segments for many animals.

General wildlife management goals for the Forest have been to expand wildlife territories and increase habitat diversity. This has been achieved by increasing available wildlife water and incorporating wildlife requirements into the design of brushland modification projects.

Modification of habitat within the Forest has mainly been removal of chaparral during fuelbreak construction. Grazing of livestock occurs on most of the grassland ranges. Utilization of grass may increase forbs which are beneficial as producers of seed which is relished by wildlife. However, competition for these forbs between wildlife and livestock may be detrimental during certain seasons of the year, such as the deer fawning season. Heavy grazing may diminish necessary grass cover for some wildlife species. The presence of wildlife in the landscape addes to aesthetic values as viewed by forest visitors and some contribute to the sport of hunting.

2. Fisheries - Twelve streams provide a variety of fish habitat which is greatly influenced by annual weather patterns.— The stream flow characteristics are rapid to intermittent during the winter and spring months. Check dams have been constructed in five streams to reduce velocity and movement of debris. The fast depletion of continuous flows during summer months restricts available habitat for natural reproduction. Local areas do have good aquatic fauna and both cold and warm water species are present, but in many very low numbers. The introduction of rainbow trout by the California Department of Fish & Game occurred as early as 1915. A change in weather trends has declined the put-and-take rainbow trout program to winter and spring months. During recent years only Trabuco, Silverado and San Juan Creek have been stocked with catchable rainbow trout. 3

 $[\]frac{1}{2}$ The Biota of the Santa Mountain, Willis E. Pequegnat

 $[\]frac{2}{}$ Cleveland National Forest Stream Survey Reports - 1967-1969

 $[\]frac{3}{}$ California Department of Fish & Game Newsrelease - April 12, 1976

San Juan Creek - Stocked upstream from San Juan Ranger Station for about eight miles. (10,000 fingerlings in 1976)

Silverado Creek - East of County Road 18 in canyon beyond Silverado. (8,000 fingerlings in 1976)

Trabuco Creek - Stocked two and one-half miles above O'Neil Park up to and including half a mile of Holy Jim Canyon. (15,000 fingerlings in 1976)

Steelhead salmon have occasionally made runs up San Mateo Creek. Last recorded observations were in 1958 when they reached Fishermans Camp and Tenaja Road crossing. During the wet winter of 1969 the run of steelhead salmon reached the National Forest boundary. —

Fish that may be found in streams on the Cleveland National Forest are:

Coldwater species

Rainbow Trout Sa

Salmo gairdnerii

Warmwater species

Green Sunfish

Lepomis cyanellus

Non-game species

Mesquito Fish Arroyo Chub Gambusia affinis Gila orcuttii

There are no ponds or reservoirs for warmwater fisheries on the National Forest.

3. Diversity of Species

a. Mammals (except deer and mountain lion)

The early settlers occasionally confronted grizzly bears, <u>Ursus chelan</u>, which preyed upon their livestock. The last recorded data was in 1908 at a site west of Santiago Peak. The black bear, <u>Euarctos americanus</u> is not native to the area and no introductions have been made.

 $[\]frac{1}{2}$ Cleveland National Forest Fisheries - Habitat Mamagement Plan 1970

Thirty seven species or subspecies of mammals are known to inhabit the study area. The medium sized mammals are addressed as predators and fur bearers. The predators depend to a large extent on small nongame animals such as rodents for food. The coyote is considered to be the most abundant mammal of the Santa Ana Mountain Range. Bobcats are common but not easily seen. They can be found in all habitats and life zones. Raccoon are associated with riparians habitats while the gray fox is nocturnal and is occasionally observed when driving at night. Two species of skunks are present. These mammals have a high degree for withstanding the tolerances imposed on them by habitat changes.

The ringtail cat is present but actual data on its range needs to be established. Badgers are infrequently observed, mainly near potreros and grasslands of southern areas. There presence in the vicinity of Modjeska Canyon and Santiago Peak has also been established.

Beaver were planted in streams throughout southern California in the 1950's by the California Department of Fish & Game. Within the study area beaver are now located in the San Juan and San Mateo drainages. Minimal habitat in the form of vegetation and water flow has not favored the beaver, but they seem to survive by constantly moving to new areas. Beaver dams seem to benefit many species of wildlife, but are generally considered harmful to cold water stream characteristics that are essential for natural fisheries reproduction.

Three types of rabbits are known - jack, cottontail and brush. The brush rabbit is the most common and can be observed most frequent on chaparral slopes. Populations build up where brush has been removed. They feed on young brush sprouts and herbaceous vegetation, of which perennial grass is a favorite.

The extremely small mammals (rodents) are not known as well, but they are of great importance. Most are capable of imposing economic damage to agricultural crops or may be vectors of disease. Most are quite prolific and contribute greatly to the food chain. Several small mammal studies have been performed within the Trabuco District.

Presence of the longtailed weasel (Mustela frenata) has been recorded at local areas. 2/ During the early settlement years, the weasel was a constant raider of chicken pens. Today the meadow mice of grassland areas are its favorite prey.

 $[\]frac{1}{2}$ San Mateo Canyon Roadless Area Study Report - May 8, 1973

 $[\]frac{2}{}$ On record at Cleveland National Forest Headquarters, San Diego, CA

The small shrew is noted for its high metabolic rate. They obtain their energy needs by feeding on spiders and insects. The California Ground squirrels are common on grassland areas and disturbed sites. There have been several grey squirrel (Sciurus griseus) observations by Forest Service personnel in the mixed coniferous forest and the lower oak woodlands of the western front country. The grey squirrel is an acorn eater and will utilize old woodpecker or common flicker holes for dens.

b. Deer

Deer were one of the primary ingredients contributing to the culture of the native Indians of the Santa Ana Mountain Range area. The early explorers and settlers also depended heavily on deer during the late 1800 s. 1/

Deer numbers have been declining over the past three decades for several reasons. Fire suppression efforts have been increasingly successful. The result has been an increase in the climax stage of chaparral, which is less than suitable deer habitat. Favored areas of habitat, riparian areas, potreros, and foothill regions have diminished with development, thus reducing deer numbers.

Most of the chaparral range is in unsatisfactory condition. Deer access is poor due to dense vegetation, where mature plants are woody with old growth. The annual new leader growth on these plants is minimal.2

Deer use is most abundant on fuelbreaks where chaparral has recently been manipulated. These areas have an abundance of new sprouts and current leader growth. Forbs and grasses are also found in greater abundance.

The annual summer fire closure on the north end of the District prohibits an annual deer harvest for that area. The population of Southern mule deer, Odocileus hemionus, is widely spread and is considered to be at a static trend.

 $[\]frac{1}{}$ Santa Ana Deer Herd Habitat Management Plan

 $[\]frac{2}{}$ Deer Herd Transect Data

There is occasional influx of deer onto land which is used for intensive agriculture. Predation damage is difficult to assess but it can be expected to continue although some relief may be obtained by depredation permits. If The introduction of intensive farming to additional lands located adjacent to the National Forest boundary may broaden the scope of deer predation.

c. Mountain Lion

The only large mammal other than mule deer on the study area is the mountain lion. It is the only natural predator of deer on the District and as such plays an important role in the ecology of the deer herd.

Other prey include rabbits, ground squirrels, wood rats and miscellaneous small mammals. Deer probably make up its staple diet.

The maintenance of a population of mountain lions in the Santa Ana Mountains is probably dependent upon two factors: large remote areas for raising young and the availability of prey species. Deer being the most important. There is need for further study to determine more specific habitat requirements for this relatively isolated population. Currently the four year hunting moratorium which began in 1972 has been extended and is still in effect.

The California State Department of Fish and Game presently estimates a population of about nine lions based on habitat and data collected on mountain lion studies throughout the State. A mountain lion track study was completed in August 1977 on the Trabuco District with preliminary results indicating 12-13 resident adults on the area.

Recent observation reports on the District support these estimates and show good distribution throughout the area. Several family groups (mother with cubs) have been sighted, indicating reproduction is occurring.

^{1/} Mammals of the Pacific States by Ingles

^{2/} California Mountain Lion Investigations With Recommendations for Management, Sitton, 1977, CA Dept. of Fish & Game, Federal Aid in Wildlife Restoration Project W-51-R

^{3/} Mountain Lion Track Study - Trabuco Ranger District, Cleveland N.F. (U.S. Forest Service & California Fish & Game Cooperative Project)

 $[\]frac{4}{}$ On record

d. Raptors

Nineteen species of raptors have been observed within or just outside the Trabuco Planning Unit and another six are suspected of occurring. Thirteen species are known to rest in the Planning Unit and include the turkey vulture, white tailed kite, Cooper's hawk, marsh hawk, red-tailed hawk, red-shouldered hawk, golden eagle, American kestrel screech owl, great horned owl, long-eared owl, barn owl and spotted owl. The sharp-shinned hawk, Ferruginious hawk, bald eagle, short-eared owl, saw-whit owl, and burrowing owl have also been observed but are only seen during the winter months. The rough-legged hawk, Swainson's hawk, osprey, prairie falcon and peregrine falcon are suspected of occurring but have not been observed.

(1) <u>Buteo's</u> - Reel-shouldered hawks utilize riparian woodlands for nesting habitat and hunting while the more adaptable red-tailed hawk may utilize riparian or chaparral depending upon the location of suitable nesting habitat. Red-tailed hawks may nest on either cliffs or trees while the red-shouldered hawk always utilizes woodlands.

Ferruginous hawks winter on the east side of the Planning Unit in the vicinity of the Temescal Valley. Rough-legged hawks and Swainson's hawks are known to occur on the west side but have not been observed in the Planning Unit.

- (2) Harrier's Although primarily a lowland raptor, marsh hawks will nest in virtually any substantial plot of grassland or marsh and nest on the ground. Most of their feeding activities are directly related to these two habitats but also subclimax chaparral.
- (3) Accipiter's Both Cooper's hawks and sharp-shinned hawks occur regularly but only the Cooper's is resident. Cooper's hawks prefer forested and riparian woodlands near a source of water and always utilize California coast line oaks as nest sites in this area. Sharp-shinned hawks are completely migratory but are seen frequently everywhere.
- (4) <u>Kites</u> White-tailed kites require open grasslands and fields for hunting and small groves of trees and large bushes such as elderberry for nesting. They feed primarily upon micnotes which are closely associated with grassy areas.

- (5) <u>Vultures</u> Turkey vultures are scavangers and are found year round throughout the Planning Unit. One nest discovered in 1974 in San Mateo Canyon was located in an old mine and contained two young. Turkey vultures commonly utilize rock cavities and jumbled bolders associated with cliffs as nest sites. Large trees are used as communal roosts.
- (6) <u>Eagles</u> Both species of eagles are covered in the Threatened and Endangered and Unique Species Section.
- (7) Owls The nocturnal component of the raptors is represented by six species which nest in the Planning Unit and two others which occur as migrants. Virtually all habitat types are utilized by one or more of these species. The short-eared owl and saw-whit owl occur only as migrants.

e. Upland Game Birds

The five species of upland game birds found within the study area are valley and mountain quail, chukar, mourning dove and bandtailed pigeon. The quail are residents with populations described as abundant. Doves and pigeons are fairly common, but populations are greatest during the winter months.

Chukar were introduced into the southern California area during the late 1950's. 1/ They are very elusive on the rock, grassy and brushy slopes of arid canyons.

The pigeons roost in the crowns of the oaks and pine trees, while the quail and doves are generally found on open grassland areas which are joined with woodland or chaparral.

The hunting of upland game birds is a recreation type sport which is enjoyed by many outdoor enthusiasts.

f. Water Birds

No water bires are listed, although they may be occasionally flying over the study area. Their presence may be influenced by the large bodies of water located outside the Forest. It is possible that small flocks or individual birds could be attracted to the area during the winter and spring season.

g. Song Birds

No breeding bird survey has been conducted for the study area, but each winter an annual Christmas bird count is undertaken by the local chapter of the National Audubon Society. — It includes areas adjacent to the National Forest near the northern portion of the study area.

 $[\]frac{1}{}$ California Department of Fish & Game

 $[\]frac{2}{1}$ National Audubon Society - The 74 Christmas Bird Count

Review of the survey data has not yielded any significant facts other than to substantiate the presence of particular species.

The Tucker Wildlife Sanctuary in Modjeska Canyon may influence bird numbers of the local area due to the bird feeding program.

Many birds visit the Forest annually. Numbers can be influenced by seasonal changes in weather, etc. Essential criteria is stratification of vegetation. The presence of available water is important during the summer and fall months.

A list of birds that may be encountered during various seasons of the year, can be found in the Appendix.

h. Reptiles and Amphibians

Twenty seven reptilian species and seven amphibian species have been recorded as occurring within the study area. The reptiles include nine lizards, seventeen snakes and a tortoise, while the amphibians include three salamanders, two toads and two frogs.

The observation frequency of these animals are generally related to seasons, abundance of rainfall and characteristics of the ephermal streams. They are deemed to be closely associated with terrestrial habitats. With limited mobility the animals are confined to local habitats.

Oak woodland and conifer forests make good amphibian habitat with rocks, logs and riparian influences as important niches. The pond turtles are locally common at pools throughout the study area. The lizards and snakes are more versatile, and are associated with most ecosystems. Feeding habits vary, but insects and small animals are important. Reptiles are more active during the summer months. The most common lizards are the sagebrush and fence lizards. The coloration of horned lizards blends them into the landscape, but alert observers will notice their presence. The redtailed skunk is not easily observed although its range extends throughout the study area. Of the seventeen snakes present, three are rattlesnakes.

 $[\]frac{1}{2}$ The Biota of the Santa Ana Mountains

4. Threatened, Endangered and Unique Wildlife

- a. California Condor (Gymongyps californianus) The last reported observation was the sighting of two condors near Santiago Peak in the fall of 1940. No nest sites are known and they were considered occasional visitors to the Santa Ana Mountain Range. Urbanization of Southern California has reduced the range and territories of the California condor. The condor is classed as an endangered species.
- b. Southern Bald Eagle (Haliaeetus leucocephalus leucocephalus) 1/
 The Southern bald eagle is classed as an endangered species.
 A migrant to the area, it is occasionally observed in the vicinity of large bodies of water. The most recent sighting was in late summer 1974, near Modjeska Canyon.
- c. Spotted Owl (Stirix occidentalis) 2/ The spotted owl is a resident in some forested areas. Recent observations have been made on the Trabuco District, and are on file at the district headquarters. The spotted owl tends to prefer forested areas. Trees may be hardwood or conifers, but dense canopy cover of 40% or greater is required. The territory of one pair of owls is about 300 acres in size and a source of available water must be present.
- d. Prairie Falcon (Falco mexicanus) 3/ The abundance and distribution of prairie falcons in California has declined and observations of breeding pairs established that only 50% produced young. Many organizations and individuals are concerned about the future of this unique bird. Observation reports on the bird are on file at the Supervisor's Office in San Diego. Additional information is located at the Trabuco District Headquarters. Further study of prairie falcon habitat is needed.
- e. Golden Eagle (Aquila chroysaetos) Golden eagles are uncommon but nest throughout the Planning Unit in remote areas. Roughly 6 pairs are currently known to nest within or adjacent to the study area. Food remains from nests within Orange and San Diego Counties indicate a strong preference for cottontail and beechey ground squirrels.

^{1/} United States List of Endangered Fauna, May 1974, USDI - Fish & Wildlife Service. At the Crossroads, 1974, California Department of Fish & Game.

^{2/} The Status of the Spotted Owl in California. Administrative Study by Gordon I. Gould, Jr., August 1974. Cooperative Study - USFS No. 39-4870.

^{3/} A Study of Prairie Falcon Populations in California. Ronald L. Garret and Dan J. Mitchell. California Department of Fish & Game Administrative Report No. 73-2, April 1973.